

Silicon Diode

FEPB16BT

Fast Efficient Rectifier

100V / 16A

DATASHEET

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OEM – General Semiconductor

Source: General Semiconductor Databook 1998

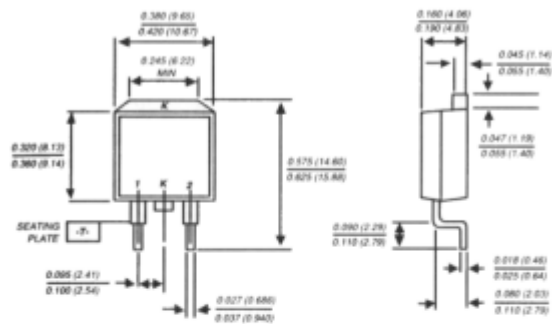
NEW PRODUCT NEW PRODUCT NEW PRODUCT

FEPB16AT THRU FEPB16JT

FAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 16.0 Amperes

TO-263AB



Dimensions are in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Dual rectifier construction, positive centertap
- ◆ Glass passivated chip junctions
- ◆ Low power loss
- ◆ Low forward voltage, high current capability
- ◆ High surge current capability
- ◆ Superfast recovery times for high efficiency
- ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	FEPB 16AT	FEPB 16BT	FEPB 16CT	FEPB 16DT	FEPB 16FT	FEPB 16GT	FEPB 16HT	FEPB 16JT	UNITS	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	500	600	Volts	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	350	420	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	500	600	Volts	
Maximum average forward rectified current at T _C =100°C	I _(AV)	16.0								Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _C =100°C per leg	I _{FSM}	200.0								Amps	
Maximum instantaneous forward voltage per leg at 8.0A	V _F	0.95			1.3		1.5			Volts	
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	10.0			500.0					µA	
Maximum reverse recovery time (NOTE 1) per leg	t _{rr}	35.0			50.0					ns	
Typical junction capacitance per leg (NOTE 2)	C _J	85.0					60.0				pF
Typical thermal resistance (NOTE 3)	R _{θJC}	2.2								°C/W	
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150								°C	

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to case per leg mounted on heatsink

RATINGS AND CHARACTERISTICS CURVES FEPB16AT THRU FEPB16JT

